

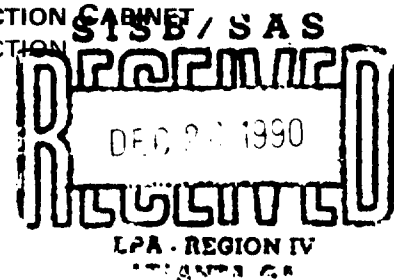
CARL H. BRADLEY
SECRETARY



WALLACE G. WILKINSON
GOVERNOR

34395

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601



December 18, 1990

Ramona Klein
CERCLA PA/SI Region IV Project Officer
U.S. Environmental Protection Agency
345 Courtland Street N.E.
Atlanta, GA 30365

RE: Addendum to Kenton County Airport Preliminary Assessment
Report, EPA ID# KYD-980557516

Dear Ms. Klein:

This letter confirms our telephone conversation on December 18, 1990 concerning the recommendation of no further remedial action planned contingent upon an acceptable closure plan submitted by the airport. I talked with Dale Burton of the Kentucky Division of Waste Management's Hazardous Waste Branch, which addresses sites subject to RCRA authority. Dale is reviewing the airports closure plan and expects a January completion date for comments concerning the plan. Therefore, it is impossible to render a final disposition of the PA until the RCRA review process is complete. Based on the preliminary review, Dale said he felt that ultimately the airport would comply with the existing Agreed Order by developing an acceptable closure. As soon as a final response is made by the Hazardous Waste Branch, I will follow-up with another addendum which should provide a sufficient basis for a final PA disposition.

Sincerely,

A handwritten signature in cursive script that reads "Mike Blanton".

Mike Blanton, Env. Eng. Tech. Sr.
Site Investigation Section
Uncontrolled Sites Branch

MB/kb

cc: Dale Burton, Hazardous Waste Branch
Carl Millanti, Manager



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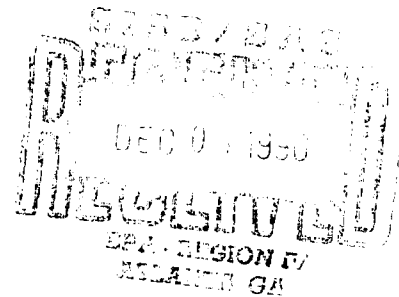
CARL H. BRADLEY
SECRETARY



3-13-91
NFRAP
Keen
WALLACE G. WILKINSON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

November 29, 1990



Mr. Craig Benedikt
CERCLA PA/SI Region IV Project Officer
U.S. Environmental Protection Agency
345 Courtland Street N.E.
Atlanta, Georgia 30365

RE: Preliminary Assessment Report
Kenton County Airport
EPA ID# KYD-980557516

Dear Mr. Benedikt:

Submitted for your review is the Preliminary Assessment Report (PA) for the Kenton County Airport in Boone County, Kentucky. The site is a former fire training facility located at the Greater Cincinnati International Airport which has been operated by the Kenton County Airport Board since the early to mid 1970's. The facility has been regulated under the Resource Conservation Recovery Act (RCRA) administered by Kentucky, however, due to the efforts of the Environmental Priorities Initiative (EPI) this PA is being conducted to evaluate the potential for further pre-remedial action under CERCLA. Based on this report, the following conclusions are made:

1. The airport is a former recycler of hazardous waste which was classified as exempt from regulations due to the beneficial use and reuse regulation. Their status was changed to transporter when reuse regulations were revised.
2. Five Solid Waste Management Units (SWMU's) have been identified from past activities. Two retention ponds, which collected liquid runoff from the fire training exercise were drained and backfilled sometime in 1988. There is no available information regarding the disposal of waste from the ponds. A 10,000 gallon underground storage tank for storage of jet fuel was also removed, however, no information is available pertaining to the tank removal. The drum storage area consisted of approximately 43 drums of F and D listed hazardous waste which originated from USI chemicals in Ohio. The drums were transported to CWM Resource Recovery, Inc. in

Mr. Benedikt
Page two
November 29, 1990

West Carrollton, Ohio. The final SWMU is the unlined depression used for simulating a burning aircraft. No remedial action has occurred in the simulation area.

3. Two Notice of Violation (NOVs) have been issued to the airport. One NOV was issued regarding the unpermitted drum storage area and the other stemmed from a release of what appeared to be ethylene glycol (antifreeze) from the ponds.
4. A U.S. EPA RCRA Compliance Evaluation Inspection was conducted in 1989. No violations, beyond those already identified by Kentucky, were noted.
5. A RCRA Closure Plan has been submitted by the airport per an Agreed Order drafted in late 1989. The plan was reviewed by Kentucky and found deficient. Mr. Dale Keith, Director of Operations for the airport stated that a different consulting agency has been hired to develop an acceptable Closure Plan.
6. Approximately 471 people are potential groundwater users within four radial miles of the site. There are no known surface water intakes within 15 miles downstream of the airport.
7. Low levels of volatile organic compounds have been detected in on-site soils and from ponded water samples collected from sampling trenches.

Therefore, it is recommended that a Site Screening Investigation not be conducted at this site contingent upon the completion of an acceptable closure plan by the airport. In the event that the Kentucky RCRA Program determines that the airport has not complied with the terms of the Agreed Order, it is recommended that the Kentucky PA/SI program conduct a Site Screening Investigation to evaluate the potential for listing this site on the National Priorities List.

Sincerely,

mt Tally for

Carl Millanti, Manager
Uncontrolled Sites Branch

CM/MB/kb

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- A - Site Maps and EPA Form 2070-12
- B - Hazardous Waste Registration Information
- C - Hazardous Waste Registration Status Change
- D - Facility Inspection Report and Drum Sample Analyses
- E - Kentucky Division of Water Report of Deficiencies
- F - Airport Closure Plan Review
- G - Photographs
- H - Population Documentation
- I - Topographic Maps and Groundwater/Municipal Water Usage

Site History

The site listed on CERCLIS as the Kenton County Airport is actually located at the Greater Cincinnati International Airport near Florence in Boone County, Kentucky. The airport is approximately 2.5 miles northwest of Florence off Donaldson Highway (Appendix A, Item 1). The area of concern is a former fire training ground operated by the Kenton County Airport Board which is a public municipal body in charge of the Greater Cincinnati International Airport Fire Department (Appendix A, Item 3). The training area is situated on the east side of Tower Drive across from the airport maintenance building. Specific background information is found in Appendix A, EPA Form 2070-12 and RCRA/NPL Questionnaire.

In 1981 the airport registered as a recycler of hazardous waste and was classified as exempt from regulations based on the beneficial use and reuse regulation (Appendix B). The facility received jet fuel contaminated with water and stored the unused portion in a 10,000 gallon underground storage tank (UST). When a fire training exercise was to be performed the fuel was discharged by gravity flow to an unlined depression 30 feet in diameter through a piping system leading from the tank to the burn area. The training exercise was performed twice annually as required by Federal Aviation Administration (FAA) regulations. According to Dale Keith, Director of Operations for the airport, the exercise has been conducted at this site since the early 1970's. The UST was reportedly removed in 1988.

In 1985 the Kentucky Division of Waste Management requested that an EPA Form 8700-12 (part A) be submitted by the airport to clarify their status as a handler of hazardous waste. In June of 1987 the airport was certified a registered transporter, having their activity changed from recycler due to regulation revisions (Appendix C).

As a result of a facility inspection by John Feldman of the Florence Field Office in 1988, approximately 43 drums were discovered on-site (Appendix D, Item 1). The drums were sampled by Kentucky and analyzed for waste profile information resulting in the discovery of F003, F005 and D001 listed hazardous wastes (Appendix D, Item 2). According to airport personnel, the drums originated from USI Chemicals (OHD-072865074) in Ohio. In December of 1988 the drums (2400 gallons) were transported to CWM Resource Recovery, Inc. in West Carrollton, Ohio (Appendix D, Item 3). A Notice of Violation (NOV) was issued resulting in a civil penalty of \$1,000 assessed against the airport.

Also during 1988, the fire training area was investigated as the possible source of a release to Gunpowder Creek. Personnel from the Kentucky Division of Water observed a green liquid entering the creek which was believed to be ethylene glycol (antifreeze). Evidently, one of the two retention ponds downgradient from the burn pit was leaking, allowing waste liquids to migrate into Gunpowder Creek (Appendix E, Item 1). The ponds were subsequently excavated and backfilled, however, disposal records for the excavated liquid and soil are not available.

Due to the NOV which was issued to the airport as a result of the storage and disposal of F-listed hazardous waste, a closure plan was submitted pursuant to an Agreed Order established between Kentucky and the airport. The closure plan review revealed several deficiencies and consequently, the plan was rejected (Appendix F, Item 1).

In August of 1989 the U.S. Environmental Protection Agency, Region IV, conducted a RCRA Compliance Evaluation Inspection at the airport fire training facility. The inspection verified the existence of 5 solid waste management units (SWMU's) and no violations beyond those already discovered by Kentucky. EPA concluded that the site should be addressed under the terms of the Agreed Order between Kentucky and the airport (Appendix F, Item 2).

A Preliminary Assessment site visit was conducted by Kentucky PA/SI staff on October 12, 1990. Although the site has been regulated under RCRA, the CERCLA involvement stems from the Environmental Priorities Initiative (EPI) which integrates a RCRA/CERCLA effort to address the most environmentally significant sites within both programs. Additionally, the release of hazardous substances by means of the fire training exercises prior to 1980 would, by definition, require CERCLA involvement.

During the visit Dale Keith, Director of Operations for the airport, provided background information and pointed out the 5 SWMU's. The two ponds (Appendix G, photos # 3 & 4) and underground tank (photo #5) have been removed, however, analytical data submitted on behalf of the airport indicates volatile organics contamination in soil, and vadose water on-site (Appendix H). Consequently, the removal of three of the SWMU's has not adequately addressed the contamination resulting from these structures. There were no observed releases into Gunpowder Creek, however, several gullies were noted with liquids having a noticeable sheen (Appendix G, photos # 8,9 & 10). Mr. Keith stated that a new consultant has been hired to draft a RCRA closure plan to address the contamination resulting from the fire training activities as well as the 5 SWMU's. The plan is expected to be completed during December of 1990 for review by the Kentucky RCRA program.

Environmental Setting

The Greater Cincinnati International Airport is situated in northeastern Boone County approximately three miles from the Ohio River. This section of Northern Kentucky is a part of the Outer Bluegrass physiographic region. The area encompasses the Greater Cincinnati Metropolitan Area consisting of a population in excess of one million people. Much of the area formed from glacial deposition, resulting in a rolling to undulating topography (USDA - 1973).

Climatic conditions in this region are characterized by a noticeable decrease in temperature and precipitation compared to the remaining portion of the state. The climate is classified humid continental with an average annual temperature of 53 degrees F and average annual rainfall of 38 inches. Precipitation is typically well distributed throughout the year, however, drought conditions have occurred in recent summers (USDA - 1973).

Soils in the area of the site are classified as Rossmoyne silt loam. This is a deep moderately well drained soil with a fragipan below a depth of 21 inches. The upper soil layers formed in loess deposits while the deeper layers formed in loamy to clayey calcareous glacial till. Soil permeability is slow with a seasonal high water table present (USDA -1973).

Geologic formations underlying the site are upper Ordovician in age. Bedrock is the Bull Fork Formation consisting of thin-bedded argillaceous limestone with interbedded blue-gray calcareous shale. Gunpowder Creek has down-cut the Bellvue Tongue of the Grant Lake Limestone exposing fossiliferous coarse grained limestone. A few small sinkholes with minor underground drainage are present, however, no maturely karst conditions exist. The average depth to bedrock is less than 10 feet. (USGS - 1972).

Groundwater availability is sufficient for domestic use in wells drilled along valley bottoms and along upland streams. Yields of 100 to 500 gallons per day (gpd) are reported from these sources. Groundwater is typically hard and may contain objectionable levels of hydrogen sulfide and salt from wells in valley bottoms. Limestone beds have few solutional openings except where shale is absent below base level of streams. Small springs flow from outcrops originating from this level. The depth to the saturated zone is approximately 25 to 60 feet (USGS - 1960).

Surface water runoff enters a tributary of Gunpowder Creek which flows approximately 400 feet from the site. Gunpowder Creek flows 18 miles to its confluence with the Ohio River. There are no surface water intakes located between the site and the mouth of Gunpowder Creek.

Target Analyses

The air route assessment was not conducted since quantitative data is not available to document an air release.

Based on population data obtained from the United States Bureau of the Census, approximately 31,975 people live within a 4 mile radius of the site. Since this is a heavily populated region, house counts were virtually impossible (Appendix I, Item 1).

A potential threat exists from direct contact with volatile organic compounds. The greatest threat stems from contact with contaminated soil. The population most likely affected is on-site airport maintenance personnel which total 122 people within a one mile radius. There is no restricted access.

Municipal drinking water is supplied by Boone County Water/Sewer District, Florence Water/Sewer Commision and Kenton County Water District #1. Kenton County Water District supplies water to Boone County and Florence from intakes located on the Licking River and Ohio River. Both intakes are situated upstream from the influence of the airport site (KDW-1988).

A potential groundwater user survey was conducted to estimate the number of private well users within a four mile radius of the site. The approximate distribution of water lines for the three companies serving the area was obtained from Sarah Stevenson of the Boone County Water/Sewer District. The information was applied to 7.5 minute, USGS topographic maps that comprise the area. By eliminating the areas known to be serviced by one of the water companies and totaling the unserved houses/buildings, an estimated value was obtained. The value was adjusted to assume 3.8 people per dwelling, resulting in a private groundwater user estimate of 471 people (Appendix I, Item 2). It should be noted that a large portion of non municipally supplied residents receive hauled water. However, at least one water hauler (Trapp Water Company) obtains water from a well located in Burlington, 3.5 miles west of the airport fire training site (Appendix I, Item 3).

Additional considerations which could ultimately affect the disposition of this site include:

1. There are no federally listed endangered species within the area of concern, however, one plant species is currently monitored for possible inclusion pending further data. The following list includes flora and fauna that have been assigned status designation (KNPC - 1986).

State-Listed Special Concern
False Mermaid (Floerkea proserpinacoides)
Redback Salamander (Plethodon cinereus)
Burbot (Lota lota)

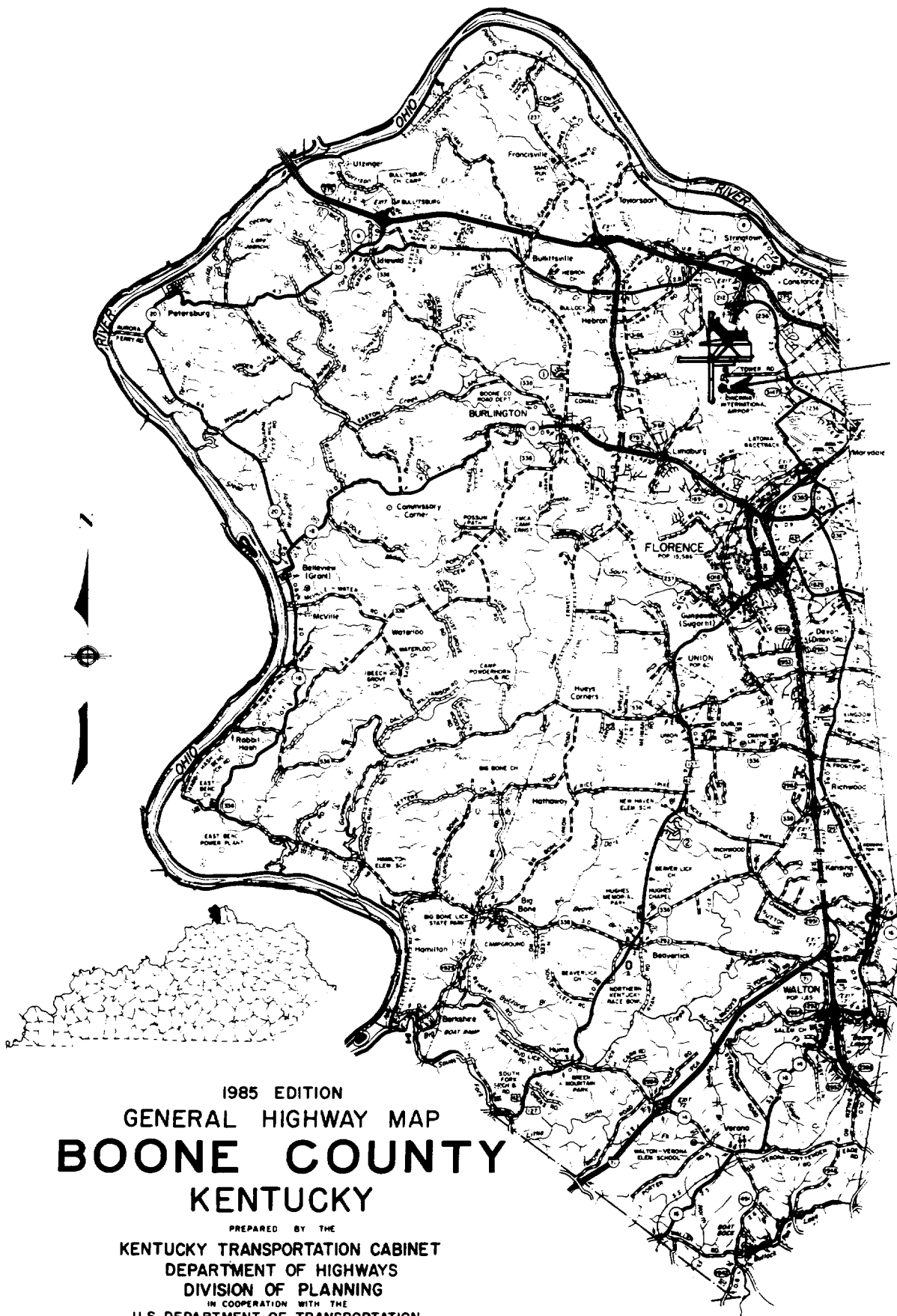
State-Listed Endangered
Scaleshell (Leptodea leptodon)
Spectacle Case (Cumberlandia monodonta)
Upland Sandpiper (Bartramia longicauda)

Federally Monitored
Synandra (Synandra hispidula)

2. Low levels of volatile organic compounds have been documented on-site. Unless a corrective action plan is implemented it can be expected that a release to surface water and/or groundwater will occur.

REFERENCES

1. U.S.D.A. 1973 Soil Survey of Boone, Campbell, Grant and Kenton Counties, Kentucky.
2. U.S.G.S. 1972 Geologic Map of Burlington and Addyston Quadrangles.
3. U.S.G.S. 1960 Availability of Groundwater in Boone, Campbell, Grant, Kenton and Pendelton Counties, Kentucky. HA-15
4. Kentucky Department for Environmental Protection, Division of Water, Kentucky Public Water Systems Inventory 11/28/88.
5. Transactions of the Kentucky Academy of Science, Kentucky Nature Preserves Commission, November 1986 Volume 47, Numbers 3-4.

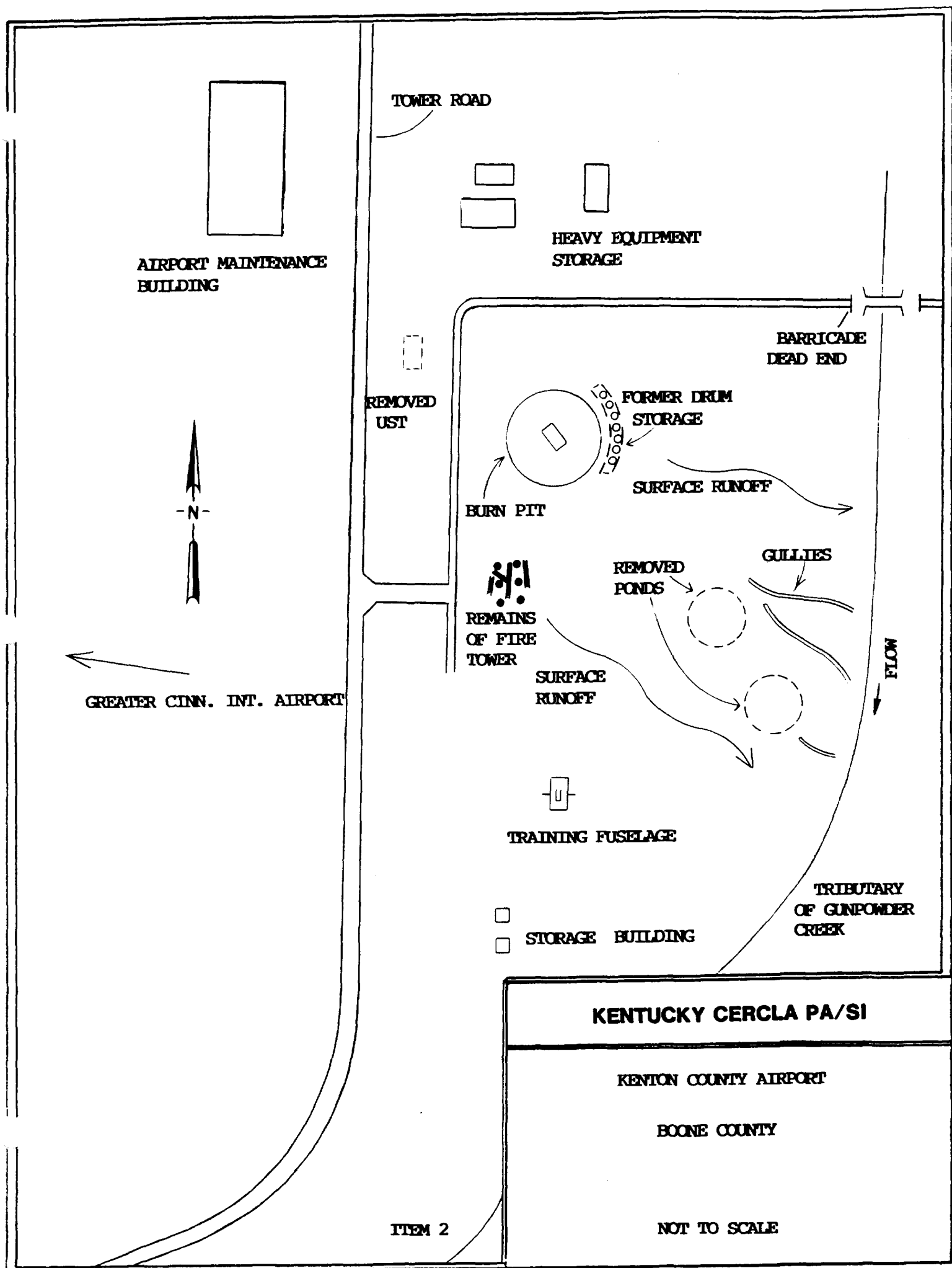


FIRE TRAINING
AREA

1985 EDITION
GENERAL HIGHWAY MAP
BOONE COUNTY
KENTUCKY

PREPARED BY THE
KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF PLANNING
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

0 1 2 3 4 MILES





POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

KY D980557516

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) KENTON COUNTY AIRPORT		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER TOWER ROAD			
03 CITY FLORENCE	04 STATE KY	05 ZIP CODE	06 COUNTY BOONE	07 COUNTY CODE 015	08 CONG DIST 04
09 COORDINATES LATITUDE 41° 10' 30.0"		LONGITUDE 084° 50' 30.0"			
10 DIRECTIONS TO SITE (Starting from nearest public road) TAKE DONALDSON ROAD EXIT OFF I-275 WEST.					

III. RESPONSIBLE PARTIES

01 OWNER (if known) GREATER CINCINNATI INT. AIRPORT		02 STREET (Business, mailing, residence) P.O. BOX 752000			
03 CITY CINCINNATI	04 STATE OH	05 ZIP CODE 45275	06 TELEPHONE NUMBER 606283-3151		
07 OPERATOR (if known and different from owner) KENTON AIRPORT BOARD		08 STREET (Business, mailing, residence) DONALDSON HIGHWAY			
09 CITY FLORENCE	10 STATE KY	11 ZIP CODE 41042	12 TELEPHONE NUMBER 606283-3151		
13 TYPE OF OWNERSHIP (Check one) <input type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input checked="" type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> G. UNKNOWN					
14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) <input type="checkbox"/> A. RCRA 3001 DATE RECEIVED: _____ MONTH DAY YEAR <input type="checkbox"/> B. UNCONTROLLED WASTE SITE (RCRA 103 d) DATE RECEIVED: _____ MONTH DAY YEAR <input type="checkbox"/> C. NONE					

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input type="checkbox"/> YES DATE 10 12 90 <input type="checkbox"/> NO MONTH DAY YEAR		BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____			
02 SITE STATUS (Check one) <input type="checkbox"/> A. ACTIVE <input checked="" type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION 1975 1988 BEGINNING YEAR ENDING YEAR <input type="checkbox"/> UNKNOWN			
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED JP4 JET FUEL, ACETONE, TOLUENE					
05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION OFF-SPECIFICATION JET FUEL AND F-LISTED SOLVENTS WERE BURNED IN AN UNLINED PIT FOR FIRE TRAINING EXERCISES. POTENTIAL FOR RELEASES TO GROUNDWATER AND NEARBY SURFACE WATER.					

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Pathways) <input type="checkbox"/> A. HIGH (Inspection required promptly) <input checked="" type="checkbox"/> B. MEDIUM (Inspection required) <input type="checkbox"/> C. LOW (Inspect on time available basis) <input type="checkbox"/> D. NONE (No further action needed, complete current disposition form)					
VI. INFORMATION AVAILABLE FROM					
01 CONTACT DALE KEITH DIRECTOR OF OPERATIONS		02 OF, Agency Organization GREATER CINN. INT. AIRPORT		03 TELEPHONE NUMBER 606283-3151	
04 PERSON RESPONSIBLE FOR ASSESSMENT MIKE BLANTON		05 AGENCY KY.PA/SI	06 ORGANIZATION KY. DWM	07 TELEPHONE NUMBER 5025646716	08 DATE 10 19 90 MONTH DAY YEAR



Hand

DIVISION OF WASTE MANAGEMENT CERTIFICATE OF REGISTRATION



Greater Cincinnati International
Airport Fire Department
P.O. Box 75000
Cincinnati, Ohio 45275

RECEIVE

DEC 11 REC'D

DIV. OF SOLID WASTE
LOUISVILLE OFFICE

793

The Division of Waste Management hereby issues the above-named installation a Certificate of Registration for the hazardous waste activity specified below. This Certificate is issued pursuant to KRS 224 and regulations issued pursuant thereto. This registration does not confer an unqualified right, but is subject to all applicable waste management provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Conformance with all such laws and regulations is the responsibility of the registrant. All rights of inspection by Division of Waste Management representatives are reserved.

Receipt of the registration fee specified below is hereby acknowledged.

COUNTY: Boone

REGISTRATION NUMBER: N/A

LEGAL STRUCTURE Non-Profit Corporation EFFECTIVE DATE: 11/19/81

REGISTRATION FEE: N/A

EXPIRATION DATE: 11/19/82

ACTIVITY: Recycler

DATE OF ISSUE: 12/3/81

Carl A. Schroeder
DIRECTOR, DIVISION OF WASTE MANAGEMENT

REGISTRATION OF HAZARDOUS WASTE ACTIVITY

ORIGINAL ☒ RENEWAL ☐

EPA ID NUMBER N/A

1. INSTALLATION NAME: Greater Cincinnati Int'l Airport Fire Department
2. INSTALLATION MAILING ADDRESS: P.O. Box 75000 Cincinnati, Ohio 45275
3. INSTALLATION LOCATION: Boone County COUNTY: Boone
4. CONTACT PERSON: R. Reeser or K. Luxenberger TELEPHONE: (606) 283-3111
5. PARENT FIRM: DNA
6. PARENT FIRM ADDRESS: DNA
7. LEGAL STRUCTURE: ☐ CORPORATION ☒ NON-PROFIT CORPORATION ☐ FEDERAL GOVERNMENT
☐ STATE GOVERNMENT ☒ LOCAL GOVERNMENT ☐ PARTNERSHIP ☐ INDIVIDUAL
☐ OTHER (SPECIFY) _____
8. TYPE OF HAZARDOUS WASTE ACTIVITY: ☐ GENERATION ☐ TRANSPORTATION ☒ RECYCLING
☐ TREATMENT ☐ STORAGE ☐ DISPOSAL ☐ UNDERGROUND INJECTION
9. MODE OF TRANSPORTATION (TRANSPORTERS ONLY): ☐ AIR ☐ RAIL ☐ HIGHWAY ☐ WATER
☐ OTHER (SPECIFY) DNA
10. SIC NUMBERS: DNA
11. NUMBER OF: SUMMARY SHEETS ATTACHED: 1 WASTES REPORTED 1
12. DOES THIS INSTALLATION QUALIFY AS A SMALL QUANTITY GENERATOR? ☐ YES ☒ NO
13. AMOUNT OF REGISTRATION FEE ENCLOSED: \$ 0
14. CERTIFICATION: I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS, AND THAT BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THAT THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

Ronald R. Reeser
APPLICANT'S NAMEAsst. Fire Chief
TITLERonald R. Reeser
SIGNATURE11-17-81
DATE

GENERAL INFORMATION

TYPE OF ACTIVITY: ☐ GENERATOR ☒ RECYCLING ☐ TREATMENT ☐ STORAGE ☐ DISPOSAL

TYPE OF FILING: ☐ ANNUAL REPORT, ☐ QUARTERLY REPORT ☒ REGISTRATION ☐ UNMANIFESTED WASTE REPORT

FILING PERIOD: BEGINNING 11/17/81 AND ENDING 11/17/82

WASTE SUMMARY

[illegible]

CHARLOTTE E. BALDWIN
SECRETARY



MARTHA LAYNE COLLINS
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FORT BOONE PLAZA
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

Division of Waste Management
May 14, 1985

Greater Cincinnati International Airport Fire Dept.
P.O. Box 7500
Cincinnati, Ohio 45275

Attention: Asst. Chief Ronald Reeser

Dear Asst. Chief Reeser :

Recent changes in the hazardous waste laws and regulations no longer allow wastes that are burned for beneficial use or reuse to be exempt from regulation. Under the new regulations, recyclers were required to submit a notification of such activity by April 4, 1985, however, we will accept your previous notification submitted to the Division in November, 1981 to fulfill this requirement.

Recyclers are also required to submit a Part A application. If you wish to continue burning hazardous wastes, the enclosed Part A must be completed and returned by July 5, 1985.

If you have any questions or if I can be of any assistance, please feel free to contact me at (502) 564-6716.

Yours truly,

A handwritten signature in cursive script, reading "Hannah J. Helm".

Hannah Helm, Supervisor
Frankfort Field Office
Div. of Waste Management

HH/blp

cc: John Feldmann



DIVISION OF WASTE MANAGEMENT CERTIFICATE OF REGISTRATION



Airport Fire Department
P.O. Box 752000
Cincinnati, Ohio 45275

The Division of Waste Management hereby issues the above-named installation a Certificate of Registration for the hazardous waste activity specified below. This Certificate is issued pursuant to KRS 224 and regulations issued pursuant thereto. This registration does not confer an unqualified right, but is subject to all applicable waste management provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Conformance with all such laws and regulations is the responsibility of the registrant. All rights of inspection by Division of Waste Management representatives are reserved.

Receipt of the registration fee specified below is hereby acknowledged.

COUNTY:

Boone

REGISTRATION NUMBER:

KYD98-055-7516

LEGAL STRUCTURE:

Private

EFFECTIVE DATE:

January 22, 1987

REGISTRATION FEE:

N/A

EXPIRATION DATE:

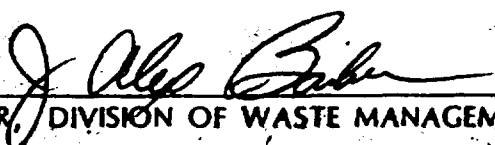
N/A

ACTIVITY:

Transporter

DATE OF ISSUE:

July 31, 1987


DIRECTOR, DIVISION OF WASTE MANAGEMENT

CARL H. BRADLEY
SECRETARY



WALLACE G. WILKINSON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

Division of Waste Management
Florence Field Office
7964 Kentucky Drive, Suite 8
Florence, Kentucky 41042
(606) 371-0598

April 20, 1988

Mr. Kim McGuire
Ohio Environmental Protection
Agency
40 South Main Street
Dayton, Ohio 45402

Dear Mr. McGuire:

Please find attached photographs taken at the Greater Cincinnati Airport Fire Training Area on March 10, 1988. The fire training area is registered as a recycling facility with USEPA, ID#: KYD980557516. They are not registered as a TSDF.

According to Chief Ron Reiser of the Airport Fire Department, the photographed drums came from USI Chemical, OHD 072865074.

Analysis on three drums shows the following results:

#446: 380,000 ppm acetone
F.P. 130°F

#494: 507,000 ppm toluene
F.P. <72°F

#529: 3 - methyl pentane
F.P. 120°F

Official lab results and the chain of custody are forthcoming. As soon as I receive these official results I will forward a copy onto you.

Please advise if I can be of further assistance.

Sincerely,

Handwritten signature of John L. Feldmann in cursive script.

John L. Feldmann
Environmental Inspector Senior

JLF:bsm

ITEM 1

Copy: Hannah Helm

CARL H. BRADLEY
SECRETARY



WALLACE G. WILKINSON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

TO: Division of Waste Management
Frankfort Office Park, 18 Reilly Road
Frankfort, Kentucky 40601

Re: Greater Cincinnati Airport
Fire Department Drum Storage
Kenton County
ID# KYD-980-557516

ATTN: Carl Millanti

FROM: William E. Davis, Director *WED*
Division of Environmental Services

DATE: April 11, 1988

Collected by: John Feldmann *cc*

Date: 03/07/88

Time: 1540

Delivered by: Hannah Helm *✓*

Date: 03/10/88

Time: 0815

Received by: Polly Ellis

Date: 03/10/88

Time: 0815

Sample Matrix: Chemical

Collection Method: Grab

Sample Identification: Drum marked 446 waste acetone

REPORT OF ANALYSIS

Report No: B02-2753

SA No: 88-0815

Finished: 04/11/88

Approved: 04/11/88

TOTAL CONSTITUENTS

CONCENTRATION

Dichlorodifluoromethane	< 10.000 mg/kg
Chloromethane	< 10.000 mg/kg
Vinyl Chloride	< 10.000 mg/kg
Bromomethane	< 10.000 mg/kg
Chloroethane	< 10.000 mg/kg
Trichlorofluoromethane	< 10.000 mg/kg
1,1-Dichloroethene	< 10.000 mg/kg
Acetone	380.000 mg/kg
Carbon Disulfide	< 10.000 mg/kg
Dichloromethane (Methylene Chloride)	< 10.000 mg/kg
trans-1,2-Dichloroethene	< 10.000 mg/kg
1,1-Dichloroethane	< 10.000 mg/kg
Vinyl Acetate	< 10.000 mg/kg
2-Butanone (Methyl Ethyl Ketone)	< 10.000 mg/kg
2,2-Dichloropropane	< 10.000 mg/kg
cis-1,2-Dichloroethene	< 10.000 mg/kg

Bromochloromethane	< 10.000 mg/kg
Chloroform	< 10.000 mg/kg
1,1,1-Trichloroethane	< 10.000 mg/kg
Carbon Tetrachloride	< 10.000 mg/kg
1,1-Dichlorobutene	< 10.000 mg/kg
Benzene	< 10.000 mg/kg
1,2-Dichloroethane	< 10.000 mg/kg
Trichloroethene	< 10.000 mg/kg
1,2-Dichloropropane	< 10.000 mg/kg
Dibromomethane	< 10.000 mg/kg
Bromodichloromethane	< 10.000 mg/kg
2-Chloroethylvinylether	< 10.000 mg/kg
cis-1,3-Dichlorobutene	< 10.000 mg/kg
4-Methyl-2-pentanone (MIBK)	< 10.000 mg/kg
Toluene	< 10.000 mg/kg
trans-1,3-Dichlorobutene	< 10.000 mg/kg
1,1,2-Trichloroethane	< 10.000 mg/kg
Tetrachloroethene	< 10.000 mg/kg
1,3-Dichloropropane	< 10.000 mg/kg
Dibromochloromethane	< 10.000 mg/kg
2-Hexanone (Methyl butyl ketone)	< 10.000 mg/kg
1,2-Dibromoethane (EDB)	< 10.000 mg/kg
Chlorobenzene	< 10.000 mg/kg
1-Chlorohexane	< 10.000 mg/kg
Ethylbenzene	< 10.000 mg/kg
1,1,1,2-Tetrachloroethane	< 10.000 mg/kg
1,3-Xylene	< 10.000 mg/kg
1,4-Xylene	< 10.000 mg/kg
1,2-Xylene	< 10.000 mg/kg
Styrene	< 10.000 mg/kg
Bromoform	< 10.000 mg/kg
Isopropylbenzene (Cumene)	< 10.000 mg/kg
Bromobenzene	< 10.000 mg/kg
1,2,3-Trichloropropane	< 10.000 mg/kg
1,1,2,2-Tetrachloroethane	< 10.000 mg/kg
n-Propylbenzene	< 10.000 mg/kg
2-Chlorotoluene	< 10.000 mg/kg
3-Chlorotoluene	< 10.000 mg/kg
4-Chlorotoluene	< 10.000 mg/kg
1,3,5-Trimethylbenzene	< 10.000 mg/kg
tert-Butylbenzene	< 10.000 mg/kg
1,2,4-Trimethylbenzene	< 10.000 mg/kg
sec-Butylbenzene	< 10.000 mg/kg
1,3-Dichlorobenzene	< 10.000 mg/kg
1,4-Dichlorobenzene	< 10.000 mg/kg
Isopropyl toluene (Cymene)	< 10.000 mg/kg
1,2-Dichlorobenzene	< 10.000 mg/kg
n-Butylbenzene	< 10.000 mg/kg
1,2-Dibromo-3-chloropropane (DBCP)	< 10.000 mg/kg
1,2,4-Trichlorobenzene	< 10.000 mg/kg
Napthalene	< 10.000 mg/kg
Hexachlorobutadiene	< 10.000 mg/kg
1,2,3-Trichlorobenzene	< 10.000 mg/kg
Flashpoint	130°F

I. BRADLEY
SECRETARY



WALLACE G. WILKINSON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

TO: Division of Waste Management
Frankfort Office Park, 18 Reilly Road
Frankfort, Kentucky 40601

Re: Greater Cincinnati Airport
Fire Department Drum Storage
Kenton County
ID# KYD-980-557516

ATTN: Carl Millanti

FROM: William E. Davis, Director *WED*
Division of Environmental Services

DATE: April 11, 1988

Collected by: John Feldmann

Date: 03/07/88

Time: 1610

Delivered by: Hannah Helm

Date: 03/10/88

Time: 0815

Received by: Polly Ellis

Date: 03/10/88

Time: 0815

Sample Matrix: Chemical

Collection Method: Grab

Sample Identification: Drum marked 494

REPORT OF ANALYSIS

Report No: B02-2755

SA No: 88-0817

Finished: 04/11/88

Approved: 04/11/88

TOTAL CONSTITUENTS

CONCENTRATION

Dichlorodifluoromethane	< 10.000 mg/kg
Chloromethane	< 10.000 mg/kg
Vinyl Chloride	< 10.000 mg/kg
Bromomethane	< 10.000 mg/kg
Chloroethane	< 10.000 mg/kg
Trichlorofluoromethane	< 10.000 mg/kg
1,1-Dichloroethene	< 10.000 mg/kg
Acetone	< 10.000 mg/kg
Carbon Disulfide	< 10.000 mg/kg
Dichloromethane (Methylene Chloride)	< 10.000 mg/kg
trans-1,2-Dichloroethene	< 10.000 mg/kg
1,1-Dichloroethane	< 10.000 mg/kg
Vinyl Acetate	< 10.000 mg/kg
2-Butanone (Methyl Ethyl Ketone)	< 10.000 mg/kg
2,2-Dichloropropane	< 10.000 mg/kg
cis-1,2-Dichloroethene	< 10.000 mg/kg

Bromochloromethane	< 10.000 mg/kg
Chloroform	< 10.000 mg/kg
1,1,1-Trichloroethane	< 10.000 mg/kg
Carbon Tetrachloride	< 10.000 mg/kg
1,1-Dichlorobropene	< 10.000 mg/kg
Benzene	< 10.000 mg/kg
1,2-Dichloroethane	< 10.000 mg/kg
Trichloroethene	< 10.000 mg/kg
1,2-Dichloropropane	< 10.000 mg/kg
Dibromomethane	< 10.000 mg/kg
Bromodichloromethane	< 10.000 mg/kg
2-Chloroethylvinylether	< 10.000 mg/kg
cis-1,3-Dichloropropene	< 10.000 mg/kg
4-Methyl-2-pentanone (MIBK)	< 10.000 mg/kg
Toluene	507.000 mg/kg
trans-1,3-Dichloropropene	< 10.000 mg/kg
1,1,2-Trichloroethane	< 10.000 mg/kg
Tetrachloroethene	< 10.000 mg/kg
1,3-Dichloropropane	< 10.000 mg/kg
Dibromochloromethane	< 10.000 mg/kg
2-Hexanone (Methyl butyl ketone)	< 10.000 mg/kg
1,2-Dibromoethane (EDB)	< 10.000 mg/kg
Chlorobenzene	< 10.000 mg/kg
1-Chlorohexane	< 10.000 mg/kg
Ethylbenzene	< 10.000 mg/kg
1,1,1,2-Tetrachloroethane	< 10.000 mg/kg
1,3-Xylene	< 10.000 mg/kg
1,4-Xylene	< 10.000 mg/kg
1,2-Xylene	< 10.000 mg/kg
Styrene	< 10.000 mg/kg
Bromoform	< 10.000 mg/kg
Isopropylbenzene (Cumene)	< 10.000 mg/kg
Bromobenzene	< 10.000 mg/kg
1,2,3-Trichloropropane	< 10.000 mg/kg
1,1,2,2-Tetrachloroethane	< 10.000 mg/kg
n-Propylbenzene	< 10.000 mg/kg
2-Chlorotoluene	< 10.000 mg/kg
3-Chlorotoluene	< 10.000 mg/kg
4-Chlorotoluene	< 10.000 mg/kg
1,3,5-Trimethylbenzene	< 10.000 mg/kg
tert-Butylbenzene	< 10.000 mg/kg
1,2,4-Trimethylbenzene	< 10.000 mg/kg
sec-Butylbenzene	< 10.000 mg/kg
1,3-Dichlorobenzene	< 10.000 mg/kg
1,4-Dichlorobenzene	< 10.000 mg/kg
Isopropyl toluene (Cymene)	< 10.000 mg/kg
1,2-Dichlorobenzene	< 10.000 mg/kg
n-Butylbenzene	< 10.000 mg/kg
1,2-Dibromo-3-chloropropane (DBCP)	< 10.000 mg/kg
1,2,4-Trichlorobenzene	< 10.000 mg/kg
Napthalene	< 10.000 mg/kg
Hexachlorobutadiene	< 10.000 mg/kg
1,2,3-Trichlorobenzene	< 10.000 mg/kg
Flashpoint	< 72°F

J. H. BRADLEY
SECRETARY



WALLACE G. WILKINSON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

TO: Division of Waste Management
Frankfort Office Park, 18 Reilly Road
Frankfort, Kentucky 40601

Re: Greater Cincinnati Airport
Fire Department Drum Storage
Kenton County
ID# KYD-980-557516

ATTN: Carl Millanti

FROM: William E. Davis, Director *WED*
Division of Environmental Services

DATE: April 11, 1988

Collected by: John Feldmann

Date: 03/07/88

Time: 1550

Delivered by: Hannah Helm

Date: 03/10/88

Time: 0815

Received by: Polly Ellis

Date: 03/10/88

Time: 0815

Sample Matrix: Chemical

Collection Method: Grab

Sample Identification: Drum marked 529

REPORT OF ANALYSIS

Report No: B02-2754

SA No: 88-0816

Finished: 04/11/88

Approved: 04/11/88

TOTAL CONSTITUENTS

CONCENTRATION

Dichlorodifluoromethane	< 2.500 mg/kg
Chloromethane	< 2.500 mg/kg
Vinyl Chloride	< 2.500 mg/kg
Bromomethane	< 2.500 mg/kg
Chloroethane	< 2.500 mg/kg
Trichlorofluoromethane	< 2.500 mg/kg
1,1-Dichloroethene	< 2.500 mg/kg
Acetone	< 2.500 mg/kg
Carbon Disulfide	< 2.500 mg/kg
Dichloromethane (Methylene Chloride)	< 2.500 mg/kg
trans-1,2-Dichloroethene	< 2.500 mg/kg
1,1-Dichloroethane	< 2.500 mg/kg
Vinyl Acetate	< 2.500 mg/kg
2-Butanone (Methyl Ethyl Ketone)	< 2.500 mg/kg
2,2-Dichloropropane	< 2.500 mg/kg
cis-1,2-Dichloroethene	< 2.500 mg/kg

Bromochloromethane	< 2,500 mg/kg
Chloroform	< 2,500 mg/kg
1,1,1-Trichloroethane	< 2,500 mg/kg
Carbon Tetrachloride	< 2,500 mg/kg
1,1-Dichloropropene	< 2,500 mg/kg
Benzene	< 2,500 mg/kg
1,2-Dichloroethane	< 2,500 mg/kg
Trichloroethene	< 2,500 mg/kg
1,2-Dichloropropane	< 2,500 mg/kg
Dibromomethane	< 2,500 mg/kg
Bromodichloromethane	< 2,500 mg/kg
2-Chloroethylvinylether	< 2,500 mg/kg
cis-1,3-Dichloropropene	< 2,500 mg/kg
4-Methyl-2-pentanone (MIBK)	< 2,500 mg/kg
Toluene	< 2,500 mg/kg
trans-1,3-Dichloropropene	< 2,500 mg/kg
1,1,2-Trichloroethane	< 2,500 mg/kg
Tetrachloroethene	< 2,500 mg/kg
1,3-Dichloropropane	< 2,500 mg/kg
Dibromochloromethane	< 2,500 mg/kg
2-Hexanone (Methyl butyl ketone)	< 2,500 mg/kg
1,2-Dibromoethane (EDB)	< 2,500 mg/kg
Chlorobenzene	< 2,500 mg/kg
1-Chlorohexane	< 2,500 mg/kg
Ethylbenzene	< 2,500 mg/kg
1,1,1,2-Tetrachloroethane	< 2,500 mg/kg
1,3-Xylene	< 2,500 mg/kg
1,4-Xylene	< 2,500 mg/kg
1,2-Xylene	< 2,500 mg/kg
Styrene	< 2,500 mg/kg
Bromoform	< 2,500 mg/kg
Isopropylbenzene (Cumene)	< 2,500 mg/kg
Bromobenzene	< 2,500 mg/kg
1,2,3-Trichloropropane	< 2,500 mg/kg
1,1,2,2-Tetrachloroethane	< 2,500 mg/kg
n-Propylbenzene	< 2,500 mg/kg
2-Chlorotoluene	< 2,500 mg/kg
3-Chlorotoluene	< 2,500 mg/kg
4-Chlorotoluene	< 2,500 mg/kg
1,3,5-Trimethylbenzene	< 2,500 mg/kg
tert-Butylbenzene	< 2,500 mg/kg
1,2,4-Trimethylbenzene	< 2,500 mg/kg
sec-Butylbenzene	< 2,500 mg/kg
1,3-Dichlorobenzene	< 2,500 mg/kg
1,4-Dichlorobenzene	< 2,500 mg/kg
Isopropyl toluene (Cymene)	< 2,500 mg/kg
1,2-Dichlorobenzene	< 2,500 mg/kg
n-Butylbenzene	< 2,500 mg/kg
1,2-Dibromo-3-chloropropane (DBCP)	< 2,500 mg/kg
1,2,4-Trichlorobenzene	< 2,500 mg/kg
Napthalene	< 2,500 mg/kg

Page 3 of 3 pages
April 11, 1988

Report No: B02-2754
SA No: 88-0816

Hexachlorobutadiene
1,2,3-Trichlorobenzene
Flashpoint

< 2.500 mg/kg
< 2.500 mg/kg
120°F

Tentative identification based upon GC/MS computer library search: 3-Methyl Pentane

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. KYD980557516		Manifest Document No. 88002		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.		
		3. Generator's Name and Mailing Address AIRPORT FIRE DEPARTMENT, GREATER CINCINNATI INTERNATIONAL AIRPORT, TOWER DRIVE, ERLANGER, KENTUCKY 41018						A. State Manifest Document Number		
4. Generator's Phone (513) 283-3112 (Chief R. Reaser)						B. State Generator's ID				
5. Transporter 1 Company Name CHEMICAL WASTE MANAGEMENT, INC.				6. US EPA ID Number ILD093945293		C. State Transporter's ID				
7. Transporter 2 Company Name				8. US EPA ID Number		D. Transporter's Phone				
9. Designated Facility Name and Site Address C/M RESOURCE RECOVERY, INC. 4301 INFIRMARY RD., P.O. BOX 453 WEST CARROLLTON, OHIO 45449				10. US EPA ID Number CHD093945293		E. State Transporter's ID				
						F. Transporter's Phone				
						G. State Facility's ID				
						H. Facility's Phone				
GENERATOR	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)					12. Containers		13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
						No.	Type			
	a.	WASTE FLAMMABLE LIQUID, n.o.s. FLAMMABLE LIQUID UN1993						2400	G	D001 F003 F005
	b.									
	c.									
d.										
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above				
a. WASTE PROFILE NO. H45979						T63				
15. Special Handling Instructions and Additional Information										
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.										
Printed/Typed Name DAVID O. ERLSMAN, AGENT FOR AIRPORT FIRE DEPARTMENT						Signature		Month Day Year		
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials									
	Printed/Typed Name					Signature		Month Day Year		
	Robert F. Fink							12 / 1 / 88		
	18. Transporter 2 Acknowledgement of Receipt of Materials									
Printed/Typed Name					Signature		Month Day Year			
FACILITY	19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.										
Printed/Typed Name						Signature		Month Day Year		

ATTACHMENT TO
KYD980557516 APPLICATION

ALL ARE NEW WASTESTREAMS
ALL ARE IN 55 GALLON DRUMS

SEP 9 3 54 PM '08
RECEIVED
DIVISION OF
WASTE MANAGEMENT

Description of Waste	EPA Waste Numbers	Physical State	Maximum Amount of Waste In Calendar Month	Estimated Annual Quantity of Waste	Unit
Hexane	D001	liquid	275	275	6
Methyl Alcohol	F003	liquid	55	55	6
Butyl Alcohol	F003	liquid	55	55	6
Acetone	F003	liquid			6
Octane	D001	liquid	275	275	6
Methyl Toluene	F003	liquid	220	220	6
Miscellaneous Solvents	D001	liquid	1100	1100	6
Oil	D001	liquid	55	55	6
Oil Miscellaneous	D001	liquid	55	55	6
Methyl Alcohol Toluene	F003 and F005	liquid	275	275	6



COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

Division of Water
7964 Kentucky Drive, Suite 8
Florence, Kentucky 41042

March 3, 1988

Mr. Ron Reeser
Greater Cincinnati International Airport
P. O. Box 75200
Cincinnati, Ohio 45275

RE: Deficiencies Noted at
Fire Department Waste Oil
Holding Ponds

Dear Mr. Reeser:

As you are aware, John Feldmann, Kentucky Division of Waste Management, received a complaint on February 26, 1988 about a greenish material being observed in Gunpowder Creek. Because of darkness and inaccessibility to several facilities, Mr. Feldmann's investigation did not determine the source of the discharged material. However, he was able to trace it to a drainageway coming from the airport property.

On February 29, 1988 an investigation by the Division of Water personnel observed a greenish colored material in the burn pit located at the Greater Cincinnati International Airport Fire Department's training facility (see diagram). Oil-stained vegetation indicated that the chemicals stored in this pond had recently topped the basin's bank and flowed towards the tributary of Gunpowder Creek. The liquid level in this pond was still just a few inches below the top of the bank. Further investigation determined that a small volume of greenish colored liquid was exiting the stream bank at a location specified on the enclosed diagram (Point A). An oil sheen on the surface of the creek water was also observed at this location. These observations indicated that a possible leak in the lower holding pond may be allowing waste oil to seep through the ground to the stream bank. Based on this investigation and observations, this office believes that the source of the greenish material observed in Gunpowder Creek resulted from an overflow of waste liquid from the burn pit. These observations and deficiencies were pointed out to you by John Feldmann and myself at the facility site on March 1, 1988. This office concurs with your belief that the greenish material was probably ethylene glycol (antifreeze).

ITEM 1

Mr. Ron Reeser
Greater Cincinnati International Airport
March 3, 1988
Page 2

As you are aware, the introduction of material, other than burnable waste into the holding ponds, must not be allowed. To correct these deficiencies, you are directed to:

1. Eliminate access of this facility to all unauthorized personnel. This may require the installation of fences or gates around the fire training facility.
2. The waste oil/ethylene glycol mixture must be removed by a chemical waste hauler and disposed of properly. However, prior to disposal a sample of this material must be analyzed to positively identify it as antifreeze. This analysis can be completed by one of the local laboratories.
3. Either increase the depth of the burn pit or raise the height of the downstream bank. Continually maintain the depth of the waste fuel well below the top of this bank.
4. According to John Feldmann, the burn pit should not contain any free-standing liquids except immediately prior to and after burning. Immediately after burning, the residual liquids should be drained to the lower holding ponds.
5. Personnel from the fire department must oversee the introduction of all burnable waste into the burn pit.
6. Comply with all directives the Division of Waste Management establishes pertaining to: (1) removal of oil contaminated soil and (2) identification and elimination of possible leaks in the lower holding pond.

/

. Ron Reeser
reater Cincinnati International Airport
March 3, 1988
Page 3

Please be aware that continued or repeated losses of fuel/oil from this facility into Gunpowder Creek is a direct violation of water quality regulations enforced by the Kentucky Division of Water. Such instances may result in further enforcement action from this office

If you have any questions, please feel free to contact our office at: 371-0598.

Sincerely,

Kevin D. Flowers

Kevin D. Flowers
Environmental Inspector Senior
Florence District Office

KDF:gad

Enclosure

CARL H. BRADLEY
SECRETARY



WALLACE G. WILKINSON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

May 17, 1989

Certified No. 75370
Return Receipt Requested

Mr. Dale Keith
Director of Operations
Greater Cincinnati International Airport
Post Office Box 752000
Cincinnati, Ohio 45275-2000

Re: Kenton County Airport Board
Notice of Deficiencies on
Closure Plan Submitted Pursuant
to Agreed Order DWM 88038

Dear Mr. Keith:

The closure plan submitted on March 3, 1989, by the Kenton County Airport Board fails to meet the requirements specified by paragraphs B., C., and D. of Agreed Order DWM 88038. The following comments must be addressed before the closure plan is considered complete.

Soils

The proposed remediation plan for the contaminated soil requires a hazardous waste facility permit before it can be implemented. If the Kenton County Airport Board chooses to treat the waste on-site, then an application for a hazardous waste permit for a land treatment facility must be submitted, reviewed, and approved by the cabinet before the plan can be implemented.

If the Kenton County Airport Board chooses to clean close the drum storage, surface impoundment, underground storage tank, and burn pit areas, then a clean closure plan must be submitted for approval. Enclosed is an outline for a closure plan that can be used in preparation of the clean closure plan.

Please disregard the regulatory citations in the outline. The citations all refer to 401 KAR Chapter 34. Agreed Order DWM 88038 requires the Kenton County Airport Board to close pursuant to 401 KAR Chapter 35.

Mr. Dale Keith
Greater Cincinnati International Airport
May 17, 1989
Page 2

Groundwater

A groundwater monitoring system must be installed which meets the requirements of 401 KAR 34:060. While this particular regulation contains many specifics of the system's design and location requirements, additional guidance may be found in the RCRA Groundwater Monitoring Technical Enforcement Guidance Document (OSWER 9950.1), Chapters 1 through 5. The basic premise of this document and the regulations is to install wells designed to be compatible with the constituents which may be in the groundwater and are located to detect the potential impact of the waste management unit on natural groundwater quality. The exact number of upgradient and downgradient wells needed must also have as a justification the immediate detection of any potential release of hazardous waste or constituents. Thus, the location, depth, and number of wells needed will depend on site specific factors.

Groundwater monitoring requirements (401 KAR 34:060) relating to closure of the regulated unit(s) includes the identification of the limits of the waste management area and requires a minimum of 4 groundwater monitoring wells. Note that separate monitoring systems for each waste management component of the site are not required provided that provisions for sampling upgradient and downgradient water quality will detect any discharge from the waste management area. 401 KAR 34:060, Section 6, defines point of compliance and waste management area. Note that if the facility contains more than one regulated unit, the waste management area is described by an imaginary line circumscribing the several regulated units. The limits of the waste management area and point of compliance must be clearly delineated on a map.

401 KAR 34:060, Section 1(2)(d), provides for groundwater monitoring waivers which may be granted if there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit including the post closure care period. A demonstration is necessary which must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator must base any predictions made on assumptions that maximize the rate of liquid migration. The information and investigative results submitted thus far are grossly inadequate to serve as the required demonstration to release the owner or operator from groundwater monitoring requirements.

1. The extent of contaminated soils has not been determined as field screening at each test pit indicated contamination.
2. Identification of groundwater at the soil/rock interface (page 6 of Attachment I and page 3 of Attachment II) is in conflict with the conclusion of the nonexistence of groundwater in the closure plan. Identification of the uppermost aquifer is necessary.

Mr. Dale Keith
Greater Cincinnati International Airport
May 17, 1989
Page 3

3. The conclusion that contamination has not extended into the underlying bedrock is unsubstantiated.
4. The closure plan states that "the test pits confirm the nonexistence of a groundwater table." The nonexistence of a groundwater table within bedrock cannot be concluded based upon information obtained by investigating soils at the site.
5. The closure plan states that "removal of the contaminated overburden soils will eliminate the possibility of any contaminated groundwater." It cannot be assumed that groundwater has not already been contaminated as analytical results from test pit number 6 indicate contamination.

The basis for selected analytical parameters has not been provided. As the copied letter from Metro Services Laboratories, Inc., advises, if there is a possibility that waste oils were disposed at this site, metals and PCBs should be included as parameters. Polynuclear aromatics or base acid neutrals should be added as parameters as they include constituents of JP-4 jet fuel. Parameters of analytical results provided in Attachment II are inconsistent. The water sample from test pit number 6 was analyzed for priority pollutant volatiles. The water samples from test pits 9 and 10 were analyzed for BTX only. A list of parameters based upon JP-4 jet fuel constituents has been enclosed as Attachment I for your information.

As was discussed in the May 4, 1989, administrative conference, the burn pit, underground storage tank, and former surface impoundment area must be closed under the standards for hazardous waste facilities since they all received a D001 characteristic hazardous waste. If analysis of samples from these areas documents that the material removed is characteristically hazardous, then the material must be disposed of in a hazardous waste disposal facility. If the material is not characteristically hazardous, then the Kentucky solid waste regulations allow the material to be disposed of in a contained landfill or a landfill approved for petroleum contaminated soils. The Kenton County Airport Board must obtain a permit modification from the cabinet for the landfill which is to receive the material.


A list of landfills approved for disposal of contaminated soils is enclosed for your information. Please note that some of the landfills on the list have expired permits. Be advised that if these sites do not have an executed Agreed Order with the cabinet giving authorization to operate or if a permit has not been issued recently, these sites cannot legally accept waste.

Agreed Order DWM 88038 specifies in paragraph F. that the Kenton County Airport Board shall correct deficiencies in the plan within 30 days of written notice. This letter is to be considered as the written notice. This would place the deadline for the Kenton County Airport Board's correction of deficiencies on June 19, 1989.

Mr. Dale Keith
Greater Cincinnati International Airport
May 17, 1989
Page 4

If you have questions concerning the division's review and resulting comments on the closure plan, contact Carol Sole at (502)564-6716, extension 203.

Sincerely,


Mohammad Alauddin, Manager
Hazardous Waste Branch
Division of Waste Management

MA:CS:pv

c: Frankfort Regional Office
Hazardous Waste Branch
Karen Baker, Ziegler and Schneider
James C. Jenkins, Camargo Associates



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

OCT 12 1989

4WD-RCRA

Ms. Hannah Helm, Manager
Compliance Monitoring and Enforcement
Branch
Division of Waste Management
Kentucky Department for Environmental
Protection
Fort Boone Plaza, Building #2
18 Reilly Road
Frankfort, Kentucky 40601

RE: USEPA CEI Inspection at Kenton County Airport Board, Florence,
Kentucky - KYD 980 557 516

Dear Ms. Helm:

Enclosed please find the inspection report for the USEPA lead CEI inspection performed at the Kenton County Airport Board, in Florence, Kentucky on August 24, 1989. Since this was an USEPA lead inspection and there was a scheduling conflict with the KDEP inspector, John Hart of my staff performed this inspection without KDEP in attendance.

It was noted during the review of the facility and of the enforcement actions taken against the facility that KDEP did not require the facility to meet several of the standard TSDF operating procedures. These include such items as site inspections, personnel training, contingency plans and records maintenance. Although this facility is no longer a generator or storer of hazardous waste, they should be required to follow all standards applicable to TSDF's until closure. In the future, when KDEP issues Orders to facilities for failure to notify of TSDF status, the Order should require that all applicable TSDF standards are to be met.

If you should have any questions concerning this inspection, please contact Brian Donaldson at (404) 347-7603.

Sincerely Yours,

A handwritten signature in cursive script that reads "Allan E. Antley".

Allan E. Antley, Chief
Waste Compliance Section

Enclosures

ITEM 2

INSPECTION REPORT

1) INSPECTOR AND AUTHOR OF REPORT

John E. Hart
Environmental Engineer

2) FACILITY LOCATION AND I.D. NUMBER

Kenton County Airport Board
Donaldson Highway
Florence, Kentucky
KYD 980 557 516

3) FACILITY MAILING ADDRESS

Greater Cincinnati International Airport
Post Office Box 752000
Cincinnati, Ohio 45275-2000

4) RESPONSIBLE OFFICIAL

Dale Keith
Director of Operations

5) INSPECTION PARTICIPANTS

John E. Hart, USEPA
Ron Reeser, Assistant Chief, Airport Fire Department
John Horton, Chief, Airport Fire Department

6) DATE AND TIME OF INSPECTION

August 24, 1989 - 11:00 a.m.

7) APPLICABLE REGULATIONS

- o Title 401 Kentucky Administrative Regulations Chapters 30-32, 34-36 and 38.
- o Title 40 Code of Federal Regulations Parts 260-262, 264-266, 268 and 270.

8) PURPOSE OF SURVEY

This was a federal lead Comprehensive Evaluation Inspection (CEI) to determine the facility's overall compliance with the applicable Resource Conservation and Recovery Act (RCRA) regulations.

9) FACILITY DESCRIPTION

The Kenton County Airport Board (KCAB) is a public municipal body responsible for the Greater Cincinnati International Airport Fire Department (AFD). The AFD, in accordance with Federal Aviation Administration regulations, are required to have fire training exercises. These exercises were performed at a burn pit (approximately thirty (30) feet

in diameter) located at the south end of the airport property near Gun Powder Creek. The pit was lined only with gravel. Adjacent to the burn pit were two surface impoundments to contain any overflow from the burn pit. A 10,000 gallon underground storage tank in the area was used to hold water-contaminated jet fuel that was used for burning in the pits. This fuel could no longer be used for in jets, but rather it was used for ground vehicles or for fire training exercises.

An inspection by Kentucky Department for Environmental Protection (KDEP) personnel on March 2, 1988, revealed five drums stored at the burn pit area. These drums were determined to be hazardous waste. Therefore, KDEP issued a Notice of Violation for the operation of an unpermitted hazardous waste storage area. An Agreed Order between KDEP and KCAB required that the tank, surface impoundment and the burn pit be closed as solid waste management units (SWMU's).

10) FINDINGS

The inspector met Mr. Reeser and Mr. Horton at the AFD offices. The inspector was informed that the facility no longer utilized the fire training pits. The AFD formerly accepted what was referred to as sump fuel (contaminated jet fuel) from different operations at the airport and stored it in the tank at the fire training area.

Since the NOV was issued by KDEP, the facility no longer accepts or manages hazardous waste. The drums stored on-site were shipped off-site on 12/1/88. The manifest and land ban notification were in compliance with the regulations.

The Agreed Order between KCAB and KDEP did not require that the facility maintain the proper RCRA operating records. The facility does maintain the hazardous waste manifests. The AFD has a draft set of standard operating procedures (SOP) that set forth the training requirements and emergency procedures for the response to various emergency situations that the AFD would be required to respond to at the airport. These include AFD's response actions to releases of hazardous materials from operations occurring at the airport. All AFD personnel are required to take extensive training in the requirements of these SOP procedures. Documentation of the training is kept by AFD.

We then proceeded to the fire training pit area. The burn pit and surface impoundments did not appear to have been used for a period of time. The underground storage tank had been excavated in preparation for closure activities. No drums or other containers were located at the area. The airport is presently undergoing construction for expansion and the fire training area is located in that zone.

KCAB, per the Agreed Order, has submitted a closure plan for the area. The Agreed Order requires that the closure plan include a groundwater monitoring system for the area and plan for the remediation of soil contamination. KDEP has noted several deficiencies in the closure plan submitted by KCAB and therefore has yet to approve the initiation of closure activities.


11) VIOLATIONS

No violations that have not previously been addressed in the Agreed Order between KCAB and KDEP were noted.

12) CONCLUSIONS

No violations of the RCRA regulations that had not previously been addressed were noted during the inspection. Since the facility does not manage nor do they plan to manage hazardous waste in the future, no further environmental problems should occur. Per the Agreed Order, any releases attributable to the fire training pits will be addressed during closure activities.

13) SIGNED




John E. Hart II
Inspector

10/10/89

Date

14) CONCURRENCE



Doyle T. Brittain, Chief
West Unit



Allan E. Antley, Chief
Waste Compliance Section

10/10/89

Date

10/10/89

Date

UNSCANNABLE

MEDIA

(PHOTOGRAPHS)

TABLE III - LABORATORY ANALYSIS SUMMARY

MARKS:C No. 1924 - W.O. No. 70148.001

1/23/89

PARAMETER	TP-9 &														
	TP-1	TP-5	TP-6	TP-7	TP-9	TP-10	TP-10	TP-11	TP-13	TP-14	TP-16	TP-17	TP-22	TP-23	TP-6
	Soil	Soil	Soil	Soil	Water	Water	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Water
	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Benzene	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	.5	<.1	.04
Bromodichloromethane			<.1				<.1			<.1					<.001
Bromoform			<.1				<.1			<.1					<.001
Carbon Tetrachloride			<.1				<.1			<.1					<.001
Chlorobenzene		<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1			<.1	<.1	<.001
Chloroethane			<.1				<.1			<.1					<.001
2-Chloroethylvinyl Ether			<.1				<.1			<.1					<.001
Chloroform			<.1				<.1			<.1					<.001
Chloromethane			<.1				<.1			<.1					<.001
Dibromochloromethane			<.1				<.1			<.1					<.001
1,2 Dichlorobenzene		<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1			<.1	<.1	<.001
1,3 Dichlorobenzene		<.1	<.1	<.1			<.1	0.5	<.1	<.1			.2	<.1	<.001
1,4 Dichlorobenzene		<.1	<.1	<.1			<.1	0.5	<.1	<.1			<.1	<.1	<.001
1,1 Dichloroethane			<.1				<.1			<.1					1.1
1,2 Dichloroethane			<.1				<.1			<.1					<.001
1,1 Dichloroethylene			<.1				<.1			<.1					.005
Trans 1,2 Dichloroethylene			<.1				<.1			<.1					<.001
1,2 Dichloropropane			<.1				<.1			<.1					<.001
Cis 1,3 Dichloropropene			<.1				<.1			<.1					<.001
Trans 1,3 Dichloropropene			<.1				<.1			<.1					<.001
Ethyl Benzene	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.001
Methylene Chloride			<.1				<.1			<.1					<.001
1,1,2,2 Tetrachloroethane			<.1				<.1			<.1					<.001
Tetrachloroethylene			<.1				<.1			<.1					<.001
Toluene	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.001
1,1,1 Trichloroethane			<.1				<.1			<.1					<.001
1,1,2 Trichloroethane			<.1				<.1			<.1					<.001
Trichloroethylene			<.1				<.1			<.1					<.001
Trichlorofluoromethane			<.1				<.1			<.1					<.001
Vinyl Chloride			<.1				<.1			<.1					<.001
O-Xylene	<.1	<.1	<.1	<.1	<.1	<.1	NR	<.1	<.1	NR	<.1	<.1	<.1	<.1	<.001
m&p-Xylene	<.1	<.1	<.1	<.1	<.1	<.1	NR	<.1	<.1	NR	<.1	<.1	<.1	<.1	<.001
Total Petroleum Hydrocarbons	16	16	2.0	18.0			24	41.0*1	41.0*1	4.6	18	98	3.0*2	3.0*2	NA

NR - Not Reported

*1 - TP-11 & 13 Combined

*2 - TP-22 & 23 Combined

POPULATION DATA DOCUMENTATION

NAME OF SITE: KENTON COUNTY AIRPORT (GREATER CINCINNATI INT. AIRPORT)

COUNTY: BOONE COUNTY

<u>RADIUS</u>	<u>HOUSE/BUILDING COUNT</u>	<u>POPULATION</u>
1/4 Mile	*	49
1/2 Mile	*	99
1 Mile	*	122
2 Miles	*	1,072
3 Miles	*	18,822
4 Miles	*	31,975

MEHTODOLOGY: House and building counts are taken from U.S.G.S Topographic map(s). These numbers are then multiplled by the conversion factor of 3.8 persons per household, as suggested in EPA's Uncontrolled Hazardous Waste Site Ranking System Users Manual, to obtain populations.

REFERENCES: USGS 7.5 MIN. TOPOGRAPHIC QUAD. BURLINGTON, KY.-OH- 1983
COVINGTON, KY. 1981
INDEPENDENCE 1981
UNION 1982

COMMENTS: HOUSE COUNTS IN THE AREA OF CONCERN WAS IMPRACTICAL DUE TO
THE DENSE POPULATION. THEREFORE, THE POPULATION ESTIMATE WAS
OBTAINED FROM : U.S. BUREAU OF THE CENSUS, CURRENT POPULATION
REPORTS, SERIES P-26, NO.86-S-SC, SOUTH-1986

GROUNDWATER USAGE ESTIMATE

NAME OF SITE: KENTON COUNTY AIRPORT (GREATER CINCINNATI INT. AIRPORT)

COUNTY: BOONE COUNTY

<u>RADIUS</u>	<u>HOUSE/BUILDING COUNT</u>	<u>POPULATION</u>
$\frac{1}{4}$ Mile	0	0
$\frac{1}{2}$ Mile	0	0
1 Mile	0	0
2 Miles	0	0
3 Miles	7	26
4 Miles	124	471

MEHTODOLOGY: House and building counts are taken from U.S.G.S Topographic map(s). These numbers are then multiplied by the conversion factor of 3.8 persons per household, as suggested in EPA's Uncontrolled Hazardous Waste Site Ranking System Users Manual, to obtain populations.

REFERENCES: SARAH STEVENS, BOONE COUNTY WATER/SEWER DISTRICT
BURLINGTON, KY. 606 586-6155
WILLIAM MOORE, TRAPP WATER CO, BELLVUE, KY.
606 586-6096

COMMENTS: NON MUNICIPALLY SUPLIED RESIDENTS RECIEVE
HAULED WATER FROM 3 SUPPLIERS: TRAPP COMPANY.
BIRKLE WATER COMPANY, RAUGH WATER SUPPLY

KENTUCKY PUBLIC WATER SYSTEMS

PWS ID	PUBLIC WATER SYSTEM NAME	STREET ADDRESS	CITY	ZIP	COUNTY	PHONE NO.	SOURCE	DIST	POPULATION	SEASON BEGIN	END	SEMI PUBLIC	REG BY	PLANT TYPE	NTWS
0072861	BLACKMONT ELEMENTARY SCHOOL	MC 61, BOX 872	HULEN	40845	BELL	606/664-2534	G	09	297	09/01	05/31		B	N	Y
0080034	BOONE CO WATER/SEWER DIST	P.O. BOX 18	BURLINGTON	41005	BOONE	606/586-6155	P	05	17,717	00/00	00/00		B	C	
0080123	FLORENCE WATER/SEWER COMM	P O BOX 485	FLORENCE	41042	BOONE	606/371-7066	P	05	23,034	00/00	00/00		B	C	
0080442	WALTON WATERWORKS DEPT	NORTH MAIN ST	WALTON	41094	BOONE	606/485-4383	P	05	2,300	00/00	00/00		B	C	
0080585	BIG BONE M H P	12125 BOAT DOCK ROAD	UNION	41091	BOONE	606/384-1146	S	05	200	00/00	00/00		B	C	
0080910	TRAPP WATER COMPANY	6697 SECOND STREET	BURLINGTON	41005	BOONE	606/586-6096	G	05	450	00/00	00/00		B	C	
0080928	ARLINGHAUS PROPERTY	412 KENTUCKY DRIVE	FORT WRIGHT	41011	BOONE	606/331-1187	G	05	25	00/00	00/00		B	C	
0080976	BIRKLE WATER SUPPLY	PO BOX 6 X THEODORE BIRKLE	PETERSBURG	41080	BOONE	606/586-8282	G	05	260	00/00	00/00		B	C	
0080984	RAUH WATER SUPPLY	5514 RIVER ROAD	HEBRON	41048	BOONE	606/689-4447	G	05	50	00/00	00/00		B	C	
0082003	PETERSBURG COMMUNITY CENTER	PO BOX 566	BURLINGTON	41005	BOONE	606/334-2117	G	05	50	09/01	05/31		B	N	Y
0082012	BULLITTSBURG BAPTIST ASSEMBLY	120 MAIN STREET	NEWPORT	41071	BOONE	606/291-2026	G	05	50	01/01	12/31		B	N	
0082026	BIG BONE LICK STATE PARK #1	PLAZA TOWER WILKERSON BLVD	FRANKFORT	40601	BOONE	502/564-3006	S	05	2,500	04/01	10/31		B	N	Y
0082081	CAMP TURNABOUT	P O BOX 238	UNION	41091	BOONE	606/384-3060	G	05	100	05/01	09/30		B	N	
0082082	C G&E EAST BEND	139 EAST 4TH STREET	CINCINNATI	45202	BOONE	513/632-2268	G	05	192	07/01	06/30		B	N	Y
0082242	RIVER RIDGE PARK INC	8637 LOWER RIVER ROAD	BURLINGTON	41005	BOONE	606/586-7282	G	05	70	04/01	10/31		B	N	
0082393	RIVERLAND PARK	139 HARRIET AVE	HIGHLAND HEIGHTS	41076	BOONE	606/781-3449	G	05	50	05/01	10/31		B	N	
0082411	POWDERHORN RESERVATION	2331 VICTORY PARKWAY	CINCINNATI	45206	BOONE	513/961-2336	P	05	50	01/01	12/31		B	N	
0082490	THE PINK PIG REST & LOUNGE	PO BOX 117	UNION	41091	BOONE	606/485-4602	P	05	50	01/01	12/31		B	N	
0082592	KELLEY ELEMENTARY SCHOOL	PO BOX 37	FLORENCE	41042	BOONE	606/586-7120	G	05	440	09/01	05/31		B	N	Y
0082667	LODER HOUSE INN	3034 FRONT STREET	PETERSBURG	41080	BOONE	606/586-8092	G	05	50	01/01	12/31		B	N	
0083124	FUNNY PAGES	3858 BELLEVUE ROAD	PETERSBURG	41080	BOONE	606/586-8418	P	05	50	01/01	12/31		B	N	
0083129	QUALITY FOREST PRODUCTS INC	PO BOX 84	WALTON	41084	BOONE	606/485-7771	P	05	10	01/01	12/31		N	N	
0090219	MARVIN HEDGES WATER SYSTEM	3860 CANE RIDGE RD	CARLISLE	40311	BOURBON	606/383-4357	G	06	100				B	C	
0090287	MILLERSBURG MUN WATER WORKS	P O BOX 338	MILLERSBURG	40348	BOURBON	606/484-2009	S	06	1,254	00/00	00/00		B	C	
0090322	NORTH MIDDLETOWN WATER DEPT	PO BOX 69	NORTH MIDDLETOWN	40357	BOURBON	606/362-4402	S	06	1,013	00/00	00/00		B	C	
0090343	PARIS WATER WORKS	800 PLEASANT STREET	PARIS	40361	BOURBON	606/987-3085	S	06	11,930	00/00	00/00		B	C	
0092243	CENTER HILL ELEMENTARY SCHOOL	RT 1 RUSSELL CAVE RD	PARIS	40361	BOURBON	606/987-4060	G	06	175	09/01	05/31		B	N	Y
0092988	PARIS STOCKYARD, INC	BOX 198 X PARIS STOCKYARD	PARIS	40361	BOURBON	606/987-2785	G	06	100	01/01	12/31		B	N	Y
0100004	OVERLAND DVPT/LOCKWOOD ESTATES	18211 VALLEYVIEW COURT	CATLETTSBURG	41129	BOYD	606/739-4853	P	08	211	00/00	00/00		B	C	
0100011	ASHLAND WATER WORKS	4040 WINCHESTER AVE	ASHLAND	41101	BOYD	606/327-2019	S	08	47,091	00/00	00/00		B	C	
0100064	CANNONSBURG WATER DIST	P O BOX 1535	ASHLAND	41101	BOYD	606/928-9808	P	08	6,683	00/00	00/00		B	C	
0100944	BIG SANDY WATER DISTRICT	P O BOX 341	CATLETTSBURG	41129	BOYD	606/739-6977	P	08	2,230	00/00	00/00		B	C	
0110097	DANVILLE CITY WATER WORKS	P O BOX 670	DANVILLE	40422	BOYLE	606/238-1241	S	07	19,008	00/00	00/00		B	C	
0110218	JUNCTION CITY WATER SYSTEM	PO BOX 326	JUNCTION CITY	40440	BOYLE	606/854-3427	P	07	3,762	00/00	00/00		B	C	
0110231	LAKE VILLAGE WATER ASSOCIATION	P O BOX 303	BURGIN	40310	BOYLE	606/748-5642	P	07	4,062	00/00	00/00		B	C	
0110345	PARKSVILLE WATER DIST	P O BOX 38	PARKSVILLE	40464	BOYLE	606/236-2746	P	07	2,584	00/00	00/00		B	C	
0110349	PERRYVILLE WATER	P O BOX 95	PERRYVILLE	40468	BOYLE	606/332-7682	P	07	2,294	00/00	00/00		B	C	
0110511	BRIGHT & KUBALE WATER CO INC	RT 2 LANCASTER ROAD	DANVILLE	40422	BOYLE	606/236-6433	P	07	726	00/00	00/00		B	C	
0110664	NORTH POINT TRAINING CENTER	P O BOX 479	BURGIN	40310	BOYLE	606/236-9012	S	07	1,050	00/00	00/00		B	C	
0110942	HEDGEVILLE WATER DISTRICT	1190 GOGGIN LANE	DANVILLE	40422	BOYLE	606/236-7149	P	07	1,089	00/00	00/00		B	C	
0120013	AUGUSTA MUNICIPAL WATER DEPT	219 MAIN STREET	AUGUSTA	41002	BRACKEN	606/756-2183	G	08	1,500	00/00	00/00		B	C	

MUNICIPAL WATER SERVICE

HAULED WATER

(ONELINER)
KENTUCKY PUBLIC WATER SYSTEMS

13:46 THURSDAY, MAY 3, 1990 13

PWS ID	PUBLIC WATER SYSTEM NAME	STREET ADDRESS	CITY	ZIP	COUNTY	PHONE NO.	SOURCE	DIST	POPULATION	SEASON BEGIN	SEASON END	SEMI PUBLIC	REG BY	PLANT TYPE	NTWS
0570495	HIGHBRIDGE SPRING WATER CO	ROUTE 1 BOX 48	WILMORE	40390	JESSAMINE	606/858-4407	S	06	2,000	00/00	00/00		B	C	
0570531	ICEBURG PURE WATER	P O BOX #12527	LEXINGTON	40583	JESSAMINE	606/885-9501	P	06	150	00/00	00/00		B	C	
0570588	ICEBURG SPRING WATER	PO BOX 12527	LEXINGTON	40583	JESSAMINE	606/885-9501	S	06	150				B	C	
0580340	PAINTSVILLE MUN WATER WORKS	P O BOX 631	PAINTSVILLE	41240	JOHNSON	606/789-3361	S	10	7,500	00/00	00/00		B	C	
0580947	RAMEY TRAILER PARK	316 FENWAY ROAD	COLUMBUS	43214	JOHNSON	606/297-1966	G	10	25	00/00	00/00		B	C	
0582172	FLATGAP ELEM SCHOOL/NEW	HC 1 BOX 381	FLATGAP	41219	JOHNSON	606/789-4057	G	10	250	09/01	05/31		B	N	Y
0582474	FLATGAP ELEMENTARY SCHOOL/GYM	HC 1 BOX 381	FLATGAP	41219	JOHNSON	606/265-3110	G	10	320	09/01	05/31		B	N	Y
0590042	BROMLEY WATER WORKS	226 BOONE ST	BROMLEY	41016	KENTON	606/261-2498	P	05	1,050	00/00	00/00		B	C	
0590220	KENTON COUNTY WATER DIST NO 1	3049 DIXIE HWY P O BOX 17010	FT MITCHELL	41017	KENTON	606/331-3066	S	05	150,000	00/00	00/00		B	C	
0590261	LUDLOW WATER WORKS	227 ELM STREET	LUDLOW	41016	KENTON	606/491-1233	P	05	6,200	00/00	00/00		B	C	
0590424	TAYLOR MILL WATER DEPT	5229 TAYLOR MILL RD	COVINGTON	41015	KENTON	606/581-2635	P	05	9,600	00/00	00/00		B	C	
0590635	WINSTON PARK WATER COMMISSION	6 GAIL COURT	TAYLOR MILL	41015	KENTON	606/431-6087	P	05	1,000	00/00	00/00		B	C	
0592101	PINER ELEM SCHOOL	5533 MADISON PIKE	INDEPENDENCE	41051	KENTON	606/356-9251	P	05	350	09/01	05/31		B	N	Y
0592264	RYLAND LAKES COUNTRY CLUB	12 SYLVAN DR	COVINGTON	41015	KENTON	606/356-9444	P	05	30	03/01	12/31		B	N	
0592710	RYLAND ELEM SCHOOL	5533 MADISON PIKE	INDEPENDENCE	41051	KENTON	606/356-9270	P	05	450	09/01	05/31		B	N	Y
0592711	VISALIA ELEM SCHOOL	5533 MADISON PK	INDEPENDENCE	41051	KENTON	606/356-9251	P	05	224	09/01	05/31		B	N	Y
0600062	CANEY CREEK WATER DISTRICT	GENERAL DELIVERY	PIPPA PASSES	41844	KNOTT	606/368-2101	G	10	300	00/00	00/00		B	C	
0600198	HINDMAN WATER DEPT	FROGTOWN ROAD	HINDMAN	41822	KNOTT	606/785-5545	G	10	600	00/00	00/00		B	C	
0600918	BOWEN TRAILER PARK	BOX 87	RED FOX	41847	KNOTT	606/642-3687	G	10	25	00/00	00/00	Y	N	C	
0602174	BEAVER CREEK ELEMENTARY SCHOOL	BOX 255	TOPHOST	41862	KNOTT	606/447-2833	G	10	475	09/01	05/31		B	N	Y
0602280	EMMALENA ELEMENTARY SCHOOL	BOX 149	EMMALENA	41740	KNOTT	606/251-3651	G	10	362	09/01	05/31		B	N	Y
0602281	HINDMAN ELEMENTARY SCHOOL	DRAWER E	HINDMAN	41822	KNOTT	606/785-5872	G	10	650	09/01	05/31		B	N	Y
0602282	KNOTT CNTY BOARD OF ED BUILD	RT 160	HINDMAN	41822	KNOTT	606/785-3166	G	10	40	01/01	12/31		B	N	Y
0602283	JONES FORK ELEMENTARY SCHOOL	BOX 129	MOUSIE	41839	KNOTT	606/946-2132	G	10	250	09/01	05/31		B	N	Y
0602284	CARR CREEK ELEMENTARY SCHOOL	GEN DEL	LITTCARR	41834	KNOTT	606/642-3883	G	10	720	09/01	05/31		B	N	Y
0602286	BECKHAM COMBS ELEM SCH	GENERAL DELIVERY	VEST	41772	KNOTT	606/785-3515	G	10	250	09/01	05/31		B	N	Y
0602341	DECOY ELEMENTARY SCHOOL	GENERAL DELIVERY	DECOY	41321	KNOTT	606/785-3502	G	10	25	09/01	05/31	Y	B	N	
0602346	KNOTT COUNTY CENTRAL HIGH	RR 160	HINDMAN	41822	KNOTT	606/785-3153	G	10	1,050	09/01	05/31		B	N	Y
0602422	CAMP NATHANIEL	DRAWER 129	EMMALENA	41740	KNOTT	606/251-3231	G	10	200	06/01	08/31		B	N	
0602594	UPPER QUICKSAND ELEM SCHOOL	GENERAL DELIVERY	HUEYSVILLE	41640	KNOTT	606/785-5576	G	10	41	09/01	05/30		B	N	Y
0602626	CORDIA ELEM / HIGH SCHOOL	RT 2 BOX 265	HAZARD	41701	KNOTT	606/785-4457	G	10	280	09/01	05/31		B	N	Y
0602752	CORPS OF ENGRS/IRISHMANS CREEK	GEN DEL	SASSAFRAS	41759	KNOTT	606/642-3308	S	10	2,450	05/01	10/31		B	N	Y
0602753	CORPS OF ENGRS/CARR FORK DAM	GEN DEL	SASSAFRAS	41759	KNOTT	606/642-3308	G	10	692	01/01	12/31		B	N	Y
0602811	CORPS OF ENGRS/LITTCARR	GEN DEL	SASSAFRAS	41759	KNOTT	606/642-3951	G	10	100	05/01	09/30		B	N	
0603050	DRAUGHNS COUNTRY KITCHEN	ROUTE 550	GARNER	41817	KNOTT	606/785-5433	G	10	50	01/01	12/31		B	N	
0603122	CANEY CREEK ELEM SCHOOL	RT 899	PIPPA PASSES	41844	KNOTT	606/785-3166	G	10	200	01/01	12/31		B	N	Y
0603134	MOUNTAIN DENTAL SERVICES	PO BOX 758	HINDMAN	41822	KNOTT	606/785-3559	G	10	15				N	N	
0603198	LAKEVIEW HEADSTART	PO BOX 98 HWY 160	RED FOX	41847	KNOTT	606/642-3318	G	10	100	01/01	12/31	Y	B	N	
0610016	BARBOURVILLE WATER & ELECTRIC	P O BOX 651	BARBOURVILLE	40906	KNOX	606/546-3187	S	09	11,636	00/00	00/00		B	C	
0610110	EAST KNOX WATER DISTRICT	P O BOX 8	ARTEMUS	40903	KNOX	606/546-5300	S	09	3,500	00/00	00/00		B	C	
0610116	RAYS MOBILE HOME PARK	RT 2 BOX 198	GRAY	40734	KNOX		G	09	11	01/01	12/31	Y	N	N	

OVERSIZED
DOCUMENT

NOT FOR
PUBLIC INSPECTION

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Facility name:	KENTON COUNTY AIRPORT		
Location:	FLORENCE, BOONE COUNTY		
EPA Region:	4		
Person(s) in charge of the facility:	DALE KEITH, DIRECTOR OF OPERATIONS		
Name of Reviewer:	MIKE BLANTON	Date:	11-6-90
General description of the facility: (For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)			
THE SITE IS A FORMER FIRE TRAINING EXERCISE			
AREA FOR THE GREATER CINCINNATI INTERNATIONAL AIRPORT			
FIRE DEPARTMENT IN FLORENCE, KY. FIVE SOLID WASTE			
MANAGEMENT UNITS HAVE BEEN IDENTIFIED : (1) REMOVED			
UNDERGROUND STORAGE TANK (2) BURN PIT (3&4) TWO			
RECLAIMED RETENTION PONDS (5) FORMER HAZARDOUS WASTE			
DRUM STORAGE AREA.			
Scores: $S_M = \frac{14.72}{11.79}$ $S_{SW} = \frac{25.27}{20.21}$ $S_A = \frac{3.21}{2.78}$ $S_3 = 0$ OBSERVED RELEASE			
NO OBSERVED RELEASE			
$S_{CE} =$			
$S_{DC} = \frac{16.74}{16.74}$ OBSERVED RELEASE			
NO OBSERVED RELEASE			

FIGURE 1
HRS COVER SHEET

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NOT FOR
PUBLIC RELEASE

25 TO 60 FT BASED ON
USGS HYDROLOGIC ATLAS HA-15

17 INCHES BASED ON CLIMATIC

DATA CENTER

SANDY LOAM & GLACIAL TILL

LIQUIDS

NO LINER IN PIT OR PONDS

SCORED ON 1,1-DICHLOROETHENE
FOUND IN SOILS

~ 600,000 GAL. BASED ON
ANNUAL HAZ WASTE REPORT
MANIFEST.

SUPPLY WELL LOCATED
NEAR BURLINGTON

Ground Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)	
1 Observed Release	0 45	1	0 / 45	45	3.1	
If observed release is given a score of 45, proceed to line 4 . If observed release is given a score of 0, proceed to line 2 .						
2 Route Characteristics					3.2	
Depth to Aquifer of Concern	0 1 2 3	2	4	6		
Net Precipitation	0 1 2 3	1	3	3		
Permeability of the Unsaturated Zone	0 1 2 3	1	2	3		
Physical State	0 1 2 3	1	3	3		
Total Route Characteristics Score			12	15		
3 Containment	0 1 2 3	1	3	3	3.3	
4 Waste Characteristics					3.4	
Toxicity/Persistence	0 3 6 9 12 15 18	1	15	18		
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	8	8		
Total Waste Characteristics Score			23	26		
5 Targets					3.5	
Ground Water Use	0 1 2 3	3	6	9		
Distance to Nearest Well/Population Served	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	8	40		
Total Targets Score			14	49		
6 If line 1 is 45, multiply 1 x 4 x 5			14,490			
If line 1 is 0, multiply 2 x 3 x 4 x 5			11,592	57,330		
7 Divide line 6 by 57,330 and multiply by 100			$S_{GW} = \frac{25.27}{20.21}$			

FIGURE 2
GROUND WATER ROUTE WORK SHEET

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20 ft
400 FT

2.5"

~400 FT

Liquid

SAME AS SW ROUTE

ONLY KNOWN USE IS
RECREATION. NO SW INTAKE
EXISTS FOR AT LEAST
8 MILES DOWNSTREAM
IN GUNPOWDER CREEK.

Surface Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0	45	1	0 / 45	45	4.1
If observed release is given a value of 45, proceed to line 4 . If observed release is given a value of 0, proceed to line 2 .						
2 Route Characteristics						4.2
Facility Slope and Intervening Terrain	0	1	(2)	3	1	2 3
1-yr. 24-hr. Rainfall	0	1	(2)	3	1	2 3
Distance to Nearest Surface Water	0	1	2	(3)	2	6 5
Physical State	0	1	2	(3)	1	3 3
Total Route Characteristics Score				13	15	
3 Containment	0	1	2	(3)	1	3 3 4.3
4 Waste Characteristics						4.4
Toxicity/Persistence	0	3	6	9	12	(15) 18
Hazardous Waste Quantity	0	1	2	3	4	5 6 7 (8)
Total Waste Characteristics Score				23	25	
5 Targets						4.5
Surface Water Use	0	1	(2)	3	3	6 9
Distance to a Sensitive Environment	(0)	1	2	3	2	0 5
Population Served/Distance to Water Intake Downstream	(0)	4	6	8	10	1 0 40
	12	16	18	20		
	24	30	32	35	40	
Total Targets Score				6	55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5				2070		
				1794	54,350	
7 Divide line 6 by 64,350 and multiply by 100				$S_{sw} = \frac{3.21}{2.78}$		

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

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3-2-77

NO QUANTITATIVE DATA
AVAILABLE

Air Route Work Sheet											
Rating Factor	Assigned Value (Circle One)		Multi- plier	Score	Max. Score	Ref. Section					
[1] Observed Release	0	45	1		45	5.1					
Date and Location:											
Sampling Protocol:											
If line [1] is 0, the $S_1 = 0$. Enter on line [5] . If line [1] is 45, then proceed to line [2] .											
[2] Waste Characteristics						5.2					
Reactivity and Incompatibility	0	1	2	3	1	3					
Toxicity	0	1	2	3	3	9					
Hazardous Waste Quantity	0	1	2	3	4	5	6	7	8	1	8
NOT SCORED											
Total Waste Characteristics Score						20					
[3] Targets						5.3					
Population Within 4-Mile Radius	{ 0 9 12 15 18		21 24 27 30		1	30					
Distance to Sensitive Environment	0	1	2	3	2	6					
Land Use	0	1	2	3	1	3					
Total Targets Score						39					
[4] Multiply [1] x [2] x [3]						35.100					
[5] Divide line [4] by 35.100 and multiply by 100 $S_3 =$											

**FIGURE 9
AIR ROUTE WORK SHEET**

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PUBLIC INFORMATION

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	s	s ²
Groundwater Route Score (S _{gw})	25.27	638.57
	20.21	408.44
Surface Water Route Score (S _{sw})	3.21	10.30
	2.78	7.73
Air Route Score (S _a)	0	0
	0	0
S _{gw} ² + S _{sw} ² + S _a ²		648.87
		416.17
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		25.47
		20.40
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M$		14.72
		11.79

OR
NOR

FIGURE 10
WORKSHEET FOR COMPUTING S_M

OR= OBSERVED RELEASE

NOR= NO OBSERVED RELEASE

NOT FOR
PUBLIC INSPECTION

DRAFT

NO GUARDED ENTRY

NO LINER SYSTEM

~122 PEOPLE BASED ON
HOUSE COUNTS & MAINTENANCE
EMPLOYEES.

Direct Contact Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multi- plier	Score	Max. Score	Ref. Section
<input type="checkbox"/> 1 Observed Incident	0	45	1	$\frac{0}{45}$	45	8.1
If line <input type="checkbox"/> 1 is 45, proceed to line <input type="checkbox"/> 4 If line <input type="checkbox"/> 1 is 0, proceed to line <input type="checkbox"/> 2						
<input type="checkbox"/> 2 Accessibility	0	1 2 <input type="checkbox"/> 3	1	3	3	8.2
<input type="checkbox"/> 3 Containment	0	<input type="checkbox"/> 15	1	15	15	8.3
<input type="checkbox"/> 4 Waste Characteristics Toxicity	0	1 <input type="checkbox"/> 2 3	5	10	15	8.4
<input type="checkbox"/> 5 Targets						8.5
Population Within a 1-Mile Radius	0	1 <input type="checkbox"/> 2 3 4 5	4	8	20	
Distance to a Critical Habitat	<input type="checkbox"/> 0	1 2 3	4	0	12	
Total Targets Score				8	32	
<input type="checkbox"/> 6 If line <input type="checkbox"/> 1 is 45, multiply <input type="checkbox"/> 2 x <input type="checkbox"/> 4 x <input type="checkbox"/> 5				3600	21,500	
If line <input type="checkbox"/> 1 is 0, multiply <input type="checkbox"/> 2 x <input type="checkbox"/> 3 x <input type="checkbox"/> 4 x <input type="checkbox"/> 5				3600		
<input type="checkbox"/> 7 Divide line <input type="checkbox"/> 6 by 21,500 and multiply by 100				Score = $\frac{16.74}{16.74}$		

FIGURE 12
DIRECT CONTACT WORK SHEET